UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,280	10/22/2003	Michael J. Wookey	30014200-1123	4926

58328	7590	11/14/2006

SONNENSCHEIN NATH & ROSENTHAL LLP
FOR SUN MICROSYSTEMS
P.O. BOX 061080
WACKER DRIVE STATION, SEARS TOWER
CHICAGO, IL 60606-1080

EXAMINER
HICKS, MICHAEL J

ART UNIT	PAPER NUMBER
2165	

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>06 September 2006</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-10</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-10</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>9/6/2006</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-10 Pending.

Response to Arguments

2.   In Applicants response dated 9/6/2006, Applicant asserts that the foster

reference is invalid due to the claim for priority to provisional application number   ₒ

60/469767.   Examiner respectfully disagrees that the instant application may claim

priority from provisional application 60/469767.

Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e)

or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. Applicant has not complied

with one or more conditions for receiving the benefit of an earlier filing date under 35

U.S.C. 119(e) as follows: The later-filed application must be an application for a patent

for an invention which is also disclosed in the prior application (the parent or original

nonprovisional application or provisional application). The disclosure of the invention in

the parent application and in the later-filed application must be sufficient to comply with

the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v.*

Performance Contracting, Inc., 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

The disclosure of the prior-filed application, Application No. 60/469767, fails to

provide adequate support or enablement in the manner provided by the first paragraph

of 35 U.S.C. 112 for one or more claims of this application. Specifically, the limitations

of each data type having a metadata in the first format that describes the respective

data instance and a reference in the first format to the respective data instance, the data

instances being maintained separately from the data types, and a subscriber receiving

the published data type responsive to subscribing to the data type of the first format is

not required to recognize the format of the data instance are not included.

In provisional application 60/469767 pages 1-3, in which Applicant discusses the

information relating to the present invention (e.g. in the section titled Enabling Active

Intellectual Capital Processing to Provide Data Neutrality), fail to make any mention of

metadata and its relation to the data types or data instances, the data instances being

maintained separately from the data types, or subscribers to the system and their ability

to recognize the format of a data instance. As these limitations are not included in

Application 60/469767, the instant application may not claim priority from Application

60/469767 and the effective filing date of the instant application shall be considered to

be 10/22/2003. Due to this the Foster reference qualifies as prior art.

As applicant presented no other arguments regarding the rejection of the pending

claims under USC 103(a), the rejection will be amended to reflect the amendments

made to the claim and maintained.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1-10 rejected under 35 U.S.C. 103(a) as being unpatentable over Lehner

et al ("Building an Information Marketplace Using a Content and Memory Based Publish/Subscribe

System", Advanced Techniques in Personalized Information Delivery; Fredrick-Alexander Universitat

Erlangen-Nurnberg, Pgs 27-46; 2001 and referred to hereinafter as Lehner) in view of Foster et al.

("OSGA Data Services", Data Access and Integration Services; August 14, 2003 and referred to

hereinafter as Foster).

As per Claims 1, 5, 9, and 10, Foster teaches a method in a data processing

system having a program, computer readable medium, and system comprising: each

data instance having one of a plurality of formats (i.e. *"For example, a file containing

geographical data might be made accessible as an image via a data service that implements a 'JPEG

Image' virtualization, with SDEs defining size, resolution, and color characteristics, and operations

provided for reading and modifying regions of the image. Another virtualization of the same data could

present it as a relational database of coordinate-based information, with various specifics of the schema

(e.g., table names, column names, types) as SDEs, and SQL as its operations for querying and updating

the geographic data...A many-to-one mapping can also occur when different service interfaces are

defined to the same underlying data virtualization that provide different subsets of available

functionality..."* The preceding text excerpt clearly indicates that each data instance may have multiple

formats (e.g. Jpeg and database).) (Page 2, Paragraph 4; Page 5, Paragraph 5); and providing a

datatype of a first format for each data instance (i.e. *"For example, a file containing geographical

data might be made accessible as an image via a data service that implements a 'JPEG Image'

virtualization, with SDEs defining size, resolution, and color characteristics, and operations provided for

reading and modifying regions of the image. Another virtualization of the same data could present it as a

relational database of coordinate-based information, with various specifics of the schema (e.g., table*

names, column names, types) as SDEs, and SQL as its operations for querying and updating the geographic data...A many-to-one mapping can also occur when different service interfaces are defined to the same underlying data virtualization that provide different subsets of available functionality..." The preceding text excerpt clearly indicates that each format has a datatype (e.g. a template/class for enabling a user to view information in an application specific manner).) (Page 2, Paragraph 4; Page 5, Paragraph 5), each datatype having a metadata in the first format that describes the respective data instance and a reference in the first format to the respective data instance (i.e. *"In both cases, the data service implementation is responsible for managing the mapping to the underlying data source...can involve simple data access or computational transformations of underlying data...SDEs may also be used to describe 'metadata' about data virtualization, such as who produced the data, its purpose, and abstract identifiers and properties of portions of the data."* The preceding text excerpt clearly indicates that the datatype/virtualization includes metadata that describes the data and a reference to the data (e.g. the data must be referenced in order to be accessed.) (Page 2, Paragraph 4; Page 5, Paragraph 4; Page 6, Paragraph 4), the data instances being maintained separately from the datatypes (i.e. *"Mappings between data virtualizations and underlying data sources and services may be one-to-one, many-to-one, one-to-many, or many-to-many."* The preceding text excerpt clearly indicates that because many different mapping are possible, the data and the datatypes/virtualizations are maintained separately.) (Page 5, Paragraph 6). Also note that performing the aforementioned operations requires a memory and a processor.

Foster fails to teach asynchronously receiving a plurality of data instances.

Lehner teaches asynchronously receiving a plurality of data instances (i.e. *"...the proposed PubScribe service relies on the asynchronous communication model of publish and subscribe, a very well known concept to implement asynchronous communication in distributed systems...Thus, traditional publish/subscribe systems implement a document based asynchronous and anonymous dispatching of messages."* The preceding text excerpt clearly indicates that data instances/messages are

asynchronously received at a subscriber through the publish/subscribe system.) (Figure 1.1; Page 28,

Paragraphs 2-3).

It would have been obvious to one skilled in the art at the time of Applicants

invention to modify the teachings of Foster with the teachings of Lehner to include

asynchronously receiving a plurality of data instances with the motivation of processing

published messages and deriving result sets for registered subscription.

As per Claims 2 and 6, Foster teaches publishing one of the plurality of

datatypes, wherein the respective data instance is not published with the datatype (i.e.

"For example, a file containing geographical data might be made accessible as an image via a data

service that implements a 'JPEG Image' virtualization, with SDEs defining size, resolution, and color

characteristics, and operations provided for reading and modifying regions of the image. Another

virtualization of the same data could present it as a relational database of coordinate-based information,

with various specifics of the schema (e.g., table names, column names, types) as SDEs, and SQL as its

operations for querying and updating the geographic data...A many-to-one mapping can also occur when

different service interfaces are defined to the same underlying data virtualization that provide different

subsets of available functionality..." The preceding text excerpt clearly indicates that the datatype (e.g.

the template through which viewing the data is available) is published, but the data instance (e.g. the

underlying data) is not, as the raw data is not viewable without translation via the datatype.) (Page 2,

Paragraph 4; Page 5, Paragraph 5).

As per Claims 3 and 7, Foster teaches a subscriber receiving the published

datatype responsive to subscribing to the datatype of the first format is not required to

recognize the format of the data instance (i.e. *"For example, a file containing geographical data*

might be made accessible as an image via a data service that implements a 'JPEG Image' virtualization,

with SDEs defining size, resolution, and color characteristics, and operations provided for reading and modifying regions of the image. Another virtualization of the same data could present it as a relational database of coordinate-based information, with various specifics of the schema (e.g., table names, column names, types) as SDEs, and SQL as its operations for querying and updating the geographic data...A many-to-one mapping can also occur when different service interfaces are defined to the same underlying data virtualization that provide different subsets of available functionality..." The preceding text excerpt clearly indicates that the format of the data instance does not need to be recognized by the receiver, due to the translation that occurs between the data instance and the virtualization/published datatype.) (Page 2, Paragraph 4; Page 5, Paragraph 5).

As per Claims 4 and 8, Foster teaches the reference to the data is a pointer (i.e. *"In both cases, the data service implementation is responsible for managing the mapping to the underlying data source."* The preceding text excerpt clearly indicates that the data is referenced by mapping. It is well known in the art that a common way of mapping data is through pointers.) (Page 2, Paragraph 4).

5.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Points of Contact

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Michael J. Hicks whose telephone number is (571) 272-

2670. The examiner can normally be reached on Monday - Friday 8:30a - 5:00p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jeffrey Gaffin can be reached on (571) 272-4146. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael J Hicks
Art Unit 2165
Phone: (571) 272-2670

Fax: (571) 273-2670